

BRUHATH BANGALORE MAHANAGARA PALIKE

DASARAHALLI ELECTRICAL DIVISION

MEASUREMENT BOOK

Name of work :- Replacement of Burntout UG Cable, Panels boards and its accessories coming under Dasarahalli Zone Parks 16,17,18,19,20,21

Job Code No:-016-23-000006

Reference to Agreement No:- EE/Ele/DZ/TEND/AG/000017/2022-23

Date:23.03.2023

Reference to Work order No:- EE/Ele/DZ/TEND/VO/000023/2022-23

Date:23.03.2023

Estimate Amount:Rs.1000000.00

EE/(Elec)/DZ/TEND/AS/07/2022-23 Date:03.01.2023

EE/(Elec)/DZ/TEND/TS/02/2022-23 Date:03.01.2023

Name of Contractor of nature of Agency:- M/s. Chowdeshwari Electricals

Measurement Book No: 6846

Page No: Date- 684534 to 4538

Bill NO :- RA Bill

Bill Period :-

Sl. No.	Description of item	Unit	Qty	Present Measurements	
				Tender Full Rate for Quoted	Cost
1	Supply of LED Streetlight luminaire with pressure die cast aluminium housing body for optimal thermal dissipation. Lamp compartment comprising of anti glare clear diffuser with Injection moulded polycarbonate material, delivering superior light output Rated life Burning Hrs 50000 hr @ Lumen Maintenance of 70%, maximum light intensity should be between 60 degrees to 70 degrees. CCT > 5500K, IP66 optical and electrical compartment & impact resistance of complete luminaire > IK08. Power Factor > 0.9 with mains, Surge Protection- Min 5KV along with Over voltage/ Overload, short circuit/ miss-wiring protection. Compatible for pole mounting with outer dia of 40mm to 50mm. Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application. Compliance to IS 10322/IEC 60598, LM 79 & LM-80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with minimized minimal tools. LED Light fixture with W System Power consumption. LED Efficiency>130lm/w, nominal CRI >75. Luminaire manufacturer should have in-house facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008. Housing with supplier word mark /name shall be Engraved / Embossing on the die cast housing/ Body part. Warranty of 2 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED manufacturer & Cree/Nichia/Lumileds/Osram make LED Source. LED Streetlight 25 Watts	No	26.00	1360.0	35360.00
2	Fabricating, supplying and erection of ... ms long hot dip Galvanized Octagonal hot dip Pole with BSEN 10025 grade S355 JO steel plate for shaft, IS 2062 for base plate with dooropening arrangements, including suitable boards, Bakelitesheet and MCBs as per IS specifications suitable to withstand the wind speed of 47 m/s for m Pole in single section and single joint welded as per IS 9595/IS10178AWS having dimensions bottom mm, top mm with 3 mm thick, suitable base plate and 4Nos of long J bolts along with template and the Pole shall be hot dip galvanized in single dipping with not less than 65micron as per ASTM-A123 and 153etc., (excluding foundation) as per drawing appended. 3 m - Top 70 mm and Bottom 130 mm dia	Each	26.00	3856.28	100263.28
3	Supplying, and fixing of Hot dip Galvanized M.S.Bracketsuitable for out door luminaries and mounted on Octagonal pole using necessary bolts, nuts etc., complete Single Arm Bracket with 1000 mm Standard 40/50 mm dia	Each	25.00	1049.92	26248.00
	VISHWARAIAH LAYOUT, ABBIGERE PARK, SHETTAHALLI, WARD NO. 12				
1	Panel board to P1	25 Mtrs			
2	P1 to P2	29 Mtrs			
3	P2 to P3	29 Mtrs			
4	P3 to P4	29 Mtrs			
5	P4 to P5	29 Mtrs			
6	P6 to P7	29 Mtrs			
7	P7 to P8	29 Mtrs			
8	P8 to P9	29 Mtrs			
9	P9 to P10	29 Mtrs			
10	P10 to P11	29 Mtrs			
11	P11 to P12	29 Mtrs			
12	P12 to P13	29 Mtrs			
13	Panel board to P26	36 Mtrs			

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14	P26 to P25	29 Mts			
15	P25 to P24	29 Mts			
16	P24 to P23	29 Mts			
17	P23 to P22	29 Mts			
18	P22 to P21	29 Mts			
19	P21 to P20	29 Mts			
20	P20 to P19	29 Mts			
21	P19 to P18	29 Mts			
22	P18 to P17	29 Mts			
23	P17 to P16	29 Mts			
24	P16 to P15	29 Mts			
25	P15 to P14	29 Mts			
26	P26 to Goliba	29 Mts			
27	P12 to Goliba	26 Mts			
28	Panel board to 9 mtrs tubler pole	29 Mts			
29	Panel board to RCC pole	138 Mts			
30	45w LED lights	72 Mts			
31	240w LED Light	26 No			
32	Panel board	1 No			
33	1mtr	1 No			
34	MCB	1 No			
35	Contactor	1 No			
36	Octangle pole	1 No			
		26 Nos			
4	Supply of LED floodlight luminaire with pressure die cast aluminium housing body for optimal thermal dissipation. Lamp compartment comprising of anti glare clear diffuser with injection moulded polycarbonate/clear glass material delivering superior light output. Rated life Burning Hrs 50000 hr @ Lumen Maintenance of 70%, CCT > 5500K, IP 66 optical and electrical compartment & impact resistance of complete luminaire > IK08. Power Factor > 0.9 with mains, Surge Protection- Min 3KV. Compatible for pole mounting with outer dia of 40mm to 50mm. Universal Voltage driver to operate wide voltage range from 100 V to 270V 50/60Hz with RoHS UL approved MPPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with minimized minimal tools. LED Light fixture with W System Power consumption. LED Efficiency > 130lm/w, nominal CRI > 75. Luminaire manufacturer should have in-house facility accredited by NABL / CPRI & any government certified agency & Design & Development facility certified by ISO 9001:2008. Housing with supplier word mark / name shall be Engraved / Embossing on the die cast housing / Body part Warranty of 2 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED manufacturer & Cree/Nichia/Lumileds/Osram make LED Source LED Floodlight 240W	Each	6.00	13597.28	81503.68
5	Fixing halogen/metal halide /SVL/LL/LED Floodlight fitting over existing pole / wall ceiling including c/a, bolts, nuts and wiring using suitable capacity wires	Each	6.00	128.52	771.12
6	Earth work excavation for Foundation by mechanical means for all works & depth upto 3 m, as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, the excavated earth or sorting & stacking the selected earth for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools, usage of machinery & other appurtenances required to complete the work (V-1, No 1.4, Page No-5 PWD SR 2021-22) Depth upto 3 m.	Cum	11.60	49.64	575.82

7	Providing and laying in position plain cement concrete for levelling course for all works in foundation. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour. Usage charges of machines, curing, and all the other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork shall be paid separately) Mix 1:3:6 (M10) Using 40 mm nominal size graded crushed coarse aggregates (V-1, P.No-15, 1 No-2.1.3 of PWD SR 2021-22)	Cum	0.84	4302.5	3622.71
8	Supplying, Fixing and Placing un-coated TMT bar Reinforcement in sub-structure complete as per Drawing and Technical Specifications (V-11, 1 No 13.1 Page No 99, PWD SR 2021-22)	Kgs	359.45	58.84	21150.04
9	Providing and laying in position Reinforced cement concrete for all sub-structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necessary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour. Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork to be paid separately) M20 Design Mix Using 20 mm nominal size graded crushed coarse aggregates (V-1, P.No-17, 1 No-2.4.2 of PWD SR 2021-22)	Cum	4.86	6026.49	29288.74
10	Crane hiring charges for substation works 1 Up to 5 hours	Hour	10.00	1020.0	10200.00
11	Earth work excavation for cable trench of 0.4 to 0.5 Mtr width and Depth upto 1 Mtr including trial pits, depositing on bank upto a lead of 50 Mtr, Supplying and Displaying necessary Danger Boards and Lighting, Using signposts and Sign Boards at every 100 Mtr	Cmt	129.00	176.8	22807.20
12	COST DATA SHEET - 19 for Laying of 1 KM length of 11 KV 3x95 Strain XLPE UIC Cable Using Conventional Laying with Excavation of 1100V grade, multi-strand copper wire with low conductor resistance single core in open or concealed system offering with specified IS-694, confirming to latest amendments. 1.5 mm2	Km	0.75	30793.12	23094.84
13	Writing for lighting/power circuit using one of FRLS/PVC insulated 1100V grade, multi-strand copper wire with low conductor resistance single core in open or concealed system offering with specified IS-694, confirming to latest amendments. 1.5 mm2	Mtr	275.00	17.68	4840.00
14	6 mm2	Mtr	19.00	5.916	1124.04
15	abstrating supplying and mounting MS box made out... SWG suitable for floor /wall mounting, fully weather proof with provision for better heat dissipation, provided with hinged front cover, equipped with tamper proof locking arrangements, with suitable size c/a with necessary cable entry pipe with gland and box should be finished finished with approved colour etc., complete 16 SWG	cm	140000.00	0.26	36400.00
16	Supplying and fixing angle iron frame work fabricated out of M.S. angle iron, and M.S. Flat..... with bolts, washers etc., accompanied with 2 coats of red oxide and then two coats of approved paint. 40 x 40 x	Mtr	15.00	187.0	2805.00
17	Supplying and fixing hyum plastic sheet 3mm thick with necessary nutres for fixing switches, regulators etc., and fixing on existing	cm	400000.00	0.18	72000.00

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18	Supplying and fixing Moulded Case Circuit Breaker (MCCB) over the existing wood/panel board using necessary screws, bolts, nuts, necessary phase separators, handle and wiring complete. Protection of Overload and Short circuit in Thermal/Magnetic Release. Micro processor release shall have Earth/Fault as per IS-13947. (Icu=100% Ics). In 4P MCCB, all Poles should have protection for Short-Circuit/Over Load. For Microprocessor MCCBS Facility for segregating Priority and Non-Priority loads must be available in the MCCB. MCCB shall be provided with double insulation (insulation between front cover and internal power circuits to avoid any accidental contact with live current carrying path with the front cover open). Multi-pole breakers shall be designed to break all the poles simultaneously and they shall have a single mechanism. 100 A 25 kA	Each	4.00	5620.2	22480.80
19	Supplying & fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC	Each	5.00	1631.32	8156.60
20	Supplying and fixing Microprocessor Based Astronomical timer switch with using necessary bolts, nuts and washers.	Each	4.00	2959.36	11837.44
21	Supply and fixing of 4pole power contactor with NO/NC contacts on existing wood/panel board using necessary bolts, nuts, washers and wiring etc, complete with AC-3 Rating and as per IS-13947. 100 to 1.1 kV, XLPE or Heat resistant PVC	Each	4.00	6120.68	24482.72
22	Insulated, PVC extruded Inner Sheath Armoured LTUG Cable as per IS-1554 (Part 1) or IS-7098 Part-1, Armouring strip thickness and resistivity as per IS-3975 16 Sqmm, 4	Km	0.75	124740.56	93555.42
23	25 Sqmm, 4 Core, (13 GI Strips - 4 x 0.8 mm)	Km	0.15	163752.84	24562.93
LAKSHMIPURA VILLAGE					
1	Hi/gmast shifting	1			
2	240 wot LED flood light	5			
3	Panel board	1			
4	Timer	1			
5	MCB	1			
6	Contactor	1			
7	Cable	65 Mtr			
KIRLOSKAR LAYOUT PARK - 1					
1	Panel board	1			
2	Timer	1			
3	MCB	1			
4	Contactor	1			
5	Cable	65 Mtrs			
VIDEO (GOVT SCHOOL) MAIN ROAD, TUBER POLE BOX					
1	Panel board	1			
2	Timer	1			
3	MCB	1			
4	Contactor	1			
5	Cable	65 Mtrs			
Sub Total					592432.37
Add GST 18 % on item no 01 to 21					85376.53
GRAND TOTAL					677808.90

Certificate

- The above said work has been carried out
- The Amount Claimed in this Bill has not been claimed in any of the previous bill

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